

### ABSTRACT

A phase error correction circuit includes a complex phase rotator for multiplying an input VSB (vestigial-sideband) signal by a phase correction signal and outputting a resultant signal, a specific frequency component elimination filter for eliminating a specific  
5 frequency component from the signal output from the complex phase rotator and outputting a resultant signal, a waveform equalizer for performing waveform distortion correction to the signal output from the specific frequency component elimination filter and outputting a resultant signal and a phase correction signal generator for detecting a phase error based on the signal output from the waveform equalizer and outputting a  
10 complex signal corresponding to the detected phase error as the phase correction signal.